

# Moisture loving & Aquatic plants

As a North Shore gardener, you may be lucky enough to have a stream bordering your landscape, or a natural spring. Or you may have installed a water feature to create the sense of tranquility that a pond or waterfall contributes to any garden. Conversely, you may have a 'problem area' where existing vegetation, be it lawn or shrubbery, suffers due to poor drainage. By thoughtfully selecting plants that are naturally adapted to boggy or waterlogged conditions, you can create a lush, multi-layered garden that isn't afraid to 'wade right in'.....

## how wet is wet?!

Compare the conditions in your garden to the five categories outlined below. Then read on for plant choices, maintenance advice & design suggestions.

### 1 bog...

...consistently damp soil, but not waterlogged.

### 2 marginal...

...waterlogged soil or water up to 15cm (6") over the top of the pot.

### 3 deep water aquatics (water lilies)...

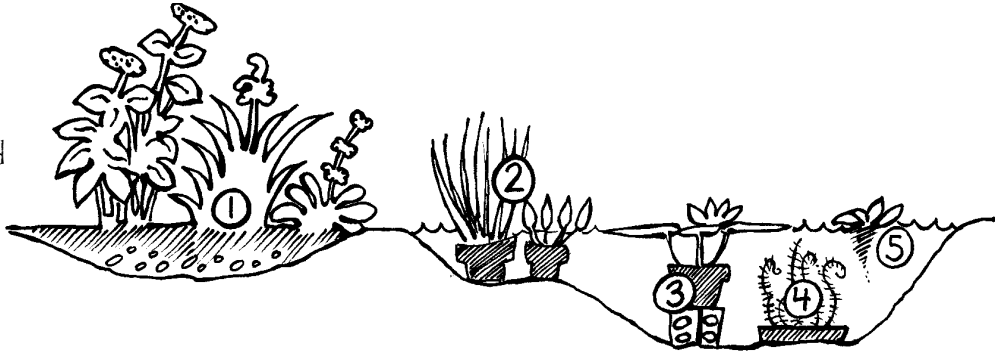
...leaves on water surface, roots & stems submerged with 30cm-1 m (12"-3ft) of water over the top of the pot.

### 4 submerged...

...leaves, stems & roots submerged in water.

### 5 free-floating...

...leaves & stems free-floating on surface, roots suspended in water.



## bog plants

Ideal subjects for boggy conditions anywhere in a landscape. Replace a sodden corner of the lawn with a slightly raised bed of moisture-loving bog plants or plan a 'bog bed' alongside a pond installation.

### bog plants for striking foliage & form

*Gunnera manicata*, *Hosta*, *Ligularia* species, *Osmunda* (Royal Fern), *Peltiphyllum* (Umbrella Plant), *Petasites*, *Rheum* (ornamental Rhubarb), *Rodgersia*.

### bog plants for blooms

*Aconitum napellus* (Monkshood), *Aruncus sylvestris* (Goat's Beard), *Astilbe*, *Eupatorium* (Joe-pye Weed), *Filipendula* species, *Hemerocallis* (Daylily), *Hosta*, *Houstonia* (Mountain Bluets), *Ligularia* species, *Lobelia cardinalis*, *Lysimachia clethroides* & *punctata*, *Mimulus* (Monkey Flower), *Polygonum*, *Primula denticulata* (Drumstick Primrose) & *Primula bullesiana* (Candelabra Primrose), *Rodgersia*, *Schizostylis coccinea* (Kaffir Lily), *Trollius* (Globeflower).

### winter interest in the bog garden

Most bog plants go completely dormant in winter, so here are some "woody" & evergreen bog plants to hold winter interest... *Andromeda polifolia* (Bog Rosemary), *Cornus* species (Red & Yellow Twig Dogwoods), *Taxodium distichum*, (Swamp Cypress), *Vaccinium* (Blueberry & Lingonberry varieties).

### "moisture-indicators"

If your site requires some supplemental watering during dry periods of the year, planting "moisture-indicators" is a good strategy. These plants are the first to wilt.....& recover! They will therefore provide an early warning system for waning moisture levels. Examples of such plants include....*Ligularia* varieties, *Petasites japonicus* (Butterbur) & *Peltiphyllum peltatum* (Umbrella Plant).

## marginal plants

...wade right in, be it on the marginal shelf of a prefabricated pond or the shallows of a natural body of water. Marginals are also choice candidates for small water features - water bowls, lined barrels, etc.

### creeping marginal plants

*Ajuga reptans*, *Caltha palustris* (Marsh Marigold), *Houttuynia cordata* (Chameleon Plant), *Lysimachia nummularia*, *Myosotis scorpioides* (Water Forget-Me-Nots), *Pontederia cordata* (Pickerel Weed), *Sagittaria* (Arrowhead).

## upright marginal plants

*Acorus gramineus* (Sweet Flag), *Colocasia esculenta* (Taro, Elephant's Ears), *Cyperus* (Papyrus), *Equisetum* species (Horsetail), *Iris pseudacorus* (Yellow Flag Iris), *Juncus effusus* (Rush), *Typha latifolia* & *minima* (Cattail).

## waterlilies

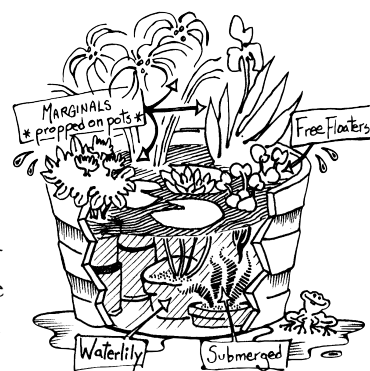
### (deep water aquatics)

The all-time favourite water plant! Waterlilies (*Nymphaea*) provide shade to restrict algae growth & shelter fish along with boasting spectacular blooms & foliage!

**NOTE...**waterlilies do not tolerate turbulence from fountains/waterfalls & require full sun. Also, waterlily stems must never dry out!

## potting marginals & waterlilies

- Both are best planted in pots to restrain growth &/or for ease of rearranging/cleaning the pond.
- Use AQUATIC SOIL or heavy clay loam. Top with 1" of gravel to hold soil or loam in place.
- Use 20-25cm (8-10") pots for marginals & 30cm (12") pots for lilies.
- Saturate soil with water before lowering pot into pond to required depth: up to 15cm (6") over top of pot for marginals & at least 30cm (12") deep or until the leaves rest comfortably on the surface of the water for lilies. Prop pots on bricks, up-ended pots, etc. if the pond is too deep.



**don't forget** to check for winter hardiness! Some marginals, waterlilies & free floaters will not survive frost. These "tropicals" can be overwintered indoors. In severe winters when your pond is in danger of freezing solid, even hardy waterplants should be removed & stored in a cool, dark location in appropriate depths of water.

## submerged waterplants

- Extremely important for keeping water clear, by absorbing minerals & carbon dioxide to starve out algae.
- Provide fish spawning & refuge areas.
- Examples: *Ceratophyllum demersum* (Hornwort) & *Myriophyllum aquaticum* (Parrot's Feather).
- These creepy looking "water weeds" are sold in bunches which can be anchored (bottom 2") in a shallow basket on the pond bottom. One bunch (3-4 stems) per 1 sq. m. (3 sq. ft.) is sufficient.
- Submerged floaters go dormant in winter, sinking back into their pots until mid spring.

## free-floating water plants

- Provide surface coverage to shade fish & reduce algae growth.
- Suspended roots remove wastes & toxins & provide excellent refuge for fish eggs & fry.
- Examples are *Pistia stratioides* (Water Lettuce) & *Eichhornia crassipes* (Water Hyacinth). These showy tropicals are available from June to Sept. since they require warm temps to thrive. Drop in water to "plant"!
- As these plants are not hardy, you can overwinter young offshoots in a tray of wet mud in a light window/greenhouse or floating in a tropical aquarium.
- The carpeting free-floater Duckweed (*Lemna minor*), that 'magically' appears, creates a textured & colourful 'carpet' on the surface of ponds. It multiplies quickly so scoop excess onto pond banks or compost.

## pond maintenance

**spring:** Plant aquatics, introduce new fish, remove dead leaves & rotting organic matter. Lift & divide overcrowded water lilies & other deep water aquatics. Feed established water plants with tablet form fertilizer.

**summer:** Weed regularly, cut back invasive growth, deadhead marginals, reduce amount of duck weed or other blanketing type pond weeds. Add fresh water if levels drop due to evaporation.

**fall:** Remove fallen leaves & unwanted organic matter. Cut back marginals once leaves & stems have turned brown. Remove faded flowers & dead leaves from water lilies. Bring tropical floaters indoors & keep them in a bucket or aquarium in a warm, bright spot.

**winter:** If fall clean up was carried out there should be little left to do in winter. Get out your books & catalogues for new ideas & plan for the upcoming year!